# **Growing Quality Cabbages**

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### **Philemon Buruzi**

There is a common saying that usually does the rounds which goes like, "Do you want to be a millionaire?, plant 1 million cabbages and sell them for a dollar each." This statement is certainly premised on the belief that it is easy to grow cabbages. Well those who have grown cabbages before will agree with me if I say that whilst it might be relatively easy to grow cabbages, it is more difficult to grow them well. By this I imply that achieving sufficiently good yields that are financially rewarding as well as the quality standards that are competitive on the market is a toll order for many farmers. The following discussion attempts to assist farmers to negotiate the pitfalls on the way to attaining a good yield of cabbages of unquestionable quality.

### **Climatic Conditions**

Cabbages grow well in most areas round Zimbabwe where irrigation water is available. They require cooler temperatures such ranging from  $18^{\circ}\text{C}$ -  $21^{\circ}\text{C}$  which is the reason why cabbages are mostly grown in the cooler months of the year particularly in agro-ecological regions 3,4 and 5 where ambient temperatures tend to be unbearably high during the summer months. On the other hand cabbages can resist ground frost especially overnight freezing though it hampers the growth processes when such conditions become protracted.

# Soils

Cabbages require deep well drained soils particularly loams which are pregnant with organic matter. A farmer should ensure that the soils are not too acidic as this is detrimental to the growth of the cabbages. A pH range of between 5.5-6.5 is recommended. A deep ploughing of up to 60cm is recommended as it is famed for promoting good rooting system as well as instrumental in breaking pest and disease cycles. Owing to the fact that nematodes can be a menace in many cabbage fields, soil fumigation is recommended and should be carried out a fortnight prior to transplanting of seedlings.

## **Establishment methods**

Cabbage can be planted either by direct seeding or through establishment of a nursery first from which seedlings are transplanted to the main field. Direct seeding is often practised under small holdings but on large scale operations seedling transplanting becomes more practical. The latter method is the most popular with farmers in Zimbabwe. Seedlings are transplanted from the nursery after hardening and having attained a height of between 7.5cm to 8cm and this height is achieved after 4-6 weeks depending with the seed variety. Seedlings are planted using spacing of 60cm by 60cm and the field should immediately be irrigated after transplanting. I however should point it out at this point that when irrigating cabbages, care should be undertaken to avoid water-logging as this goes a long way in circumventing the occurrence of stem and root rot diseases.

## **Fertiliser requirements**

It is always recommended that one should have their soil tested in order to be able to determine the level of fertilisation needed. Cabbages require a total of 250-300kg/ha of nitrogen. The fertiliser is best applied in the form of a compound fertiliser providing phosphorus, magnesium and potash to the tune of 100kg/ha, 100kg/ha and 200kg/ha respectively just before transplanting. As pointed out earlier the exact amount needed in one's field is calculable after the soil has been tested.

#### Weed control

It is important for a farmer ensure that their field is always free of weeds as this ensures that all the fertiliser and water provided benefits the crop entirely. Experts also state that a clean field is less prone to pests and diseases since some of these come into the field via the network of weeds. Mechanical cultivation should be done during land preparation until the plants are about half-grown. The first cultivation should be done 2 to 3 weeks after transplanting. This however is not a rule of thumb as farmers are should weed as frequently as their weed challenge requires.

#### Pests and diseases

Cabbages are affected by a lot of pests at any point of their growth. The most common examples that easily come to mind are aphids, bollworms, diamond black moths, Bagrada bug, red spider mites, cabbage webworm, cutworms and nematodes. The most troublesome cabbage diseases that growers may encounter are damping- off, clubroot, fusarium wilt, blackleg, downy mildew, blackrot and leafspot to mention but a few. (I would like to invite readers to lookout for the next issue as we will dwell on these diseases in greater detail). In order to avoid losses through disease and pests, farmers should routinely spray their cabbages with chemicals. They are also encouraged to use certified seed always or if not possible treat all seed with hot water before planting their nurseries. Treatment of seedbeds with fungicides is also another way of breaking the pest and disease cycles. Weed control has always been implicated as instrumental in assisting the control of pests in cabbages especially if the area is infested with cruciferous weeds. Last but certainly not the least is the fact that farmers should avoid planting cabbages in same field time after time, it is recommended that they practise crop rotations in order to deal with the pest and diseases.

For all questions and comments: <a href="mailto:philemonburuzi@gmail.com">philemonburuzi@gmail.com</a>. Responses will be provided within the shortest possible time.